

WHAT IS CLAIMED IS:

1. A digital camera system comprising:
 - a detecting means that detects a given feature point from an image data;
 - 5 a receiving means that receives an order from a user;
 - a selecting means that selects each feature point in accordance with a given order instructed by the receiving means when a plurality of feature points are detected; and
 - 10 a display that displays feature point information identifying the feature point selected by the selecting means.
2. The digital camera system according to claim 1, wherein
 - 15 the display displays information regarding the feature point overlaid with the image data.
3. The digital camera system according to claim 1 further comprising:
 - 20 a face detection means that detects the size of a face from the feature point detected by detecting means;
 - wherein the selecting means selects the face in descending order of the face size detected by the
 - 25 face detection means.
4. The digital camera system according to claim 1 further comprising:
 - a distance detection means that detects a distance
 - 30 to the feature point detected by the detecting means;
 - wherein the selecting means selects the feature point in ascending order of the distance detected by the distance detection means.
 - 35
5. The digital camera system according to claim 1 further comprising:

a focus-area-setting means that sets a given area including the feature point detected by the detecting means as a focus area for detecting focus.

5 6. The digital camera system according to claim 1 further comprising:

a photometry-area-setting means that sets a given area including the feature point detected by the detecting means as a photometry area.

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7. A digital camera system comprising:

a detecting means that detects a given feature point from an image data;

15 a display that displays the feature point detected by the detecting means;

a receiving means that receives information regarding the feature point displayed by the display; and
a memory that stores the feature point and information regarding the feature point.

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8. The digital camera system according to claim 7, wherein the information regarding the feature point is specific name information.

25 9. The digital camera system according to claim 7, wherein the information regarding the feature point is priority information determined when a plurality of feature points are detected at a time.

30 10. The digital camera system according to claim 9 further comprising:

a discriminating means that discriminates the priority information; and

35 a selecting means that selects feature point in order of the priority discriminated by the discriminating means.

11. The digital camera system according to claim 9 further comprising:

a distance-measuring-area-setting means that sets a distance measuring area for measuring a distance to a subject displayed on the display;

wherein the priority information is a priority among the plurality of feature points upon setting the distance measuring area by the distance-measuring-area-setting means.

12. The digital camera system according to claim 9 further comprising:

a photometry-area-setting means that sets a photometry area for measuring lightness of the subject displayed on the display;

wherein the priority information is a priority among the plurality of feature points upon setting the photometry area by the photometry-area-setting means.

13. The digital camera system according to claim 7, wherein the information regarding the feature point is at least one of color process information and outline correction process information upon storing the image data including the feature point.

14. The digital camera system according to claim 7, wherein the information regarding the feature point is at least one of color process information and outline correction process information upon reproducing the image data including the feature point.

15. The digital camera system according to claim 7 further comprising:

a discriminating means that discriminates and displays whether or not at least one of the feature

point and information regarding the feature point displayed on the display is stored in the memory.

16. A digital camera system comprising:

- 5 a detecting means that detects a given feature point from an image data;
- a display that displays the feature point detected by the detecting means;
- a input means that inputs information regarding the feature point displayed by the display;
- 10 a instruction means that instructs to store the feature point and information regarding the feature point in connection with the image data; and
- a memory that stores the feature point, information regarding the feature point, and the image data
- 15 instructed by the instruction means.

17. The digital camera system according to claim 16, wherein the information regarding the feature point is positional information in the image data upon

20 detecting the feature point from the image data.

18. A digital camera system comprising:

- a memory that stores a first feature point and first specific name information regarding the first feature point;
- 25 a detecting means that detects a given feature point from an image data;
- an input means that inputs second specific name information regarding a second feature point detected by the detecting means; and
- 30 a storing instruction means that instructs to additionally store in the memory the second feature point when the first specific name information and the second specific name information are identical
- 35 and the first feature point and the second feature point are different.

19. A digital camera system comprising:
- a first memory that stores a first feature point and specific name information regarding the first feature point;
 - a second memory that stores a second feature point and the specific name information in connection with an image data; and
 - a storing instruction means that instructs to additionally store in the first memory the second feature point when the first feature point and the second feature point are different.
20. A digital camera system comprising:
- a first memory that stores a first feature point and specific name information regarding the first feature point;
 - a second memory that stores a second feature point and the specific name information in connection with an image data; and
 - a storing instruction means that instructs to additionally store in the second memory the first feature point when the first feature point and the second feature point are different.
21. A digital camera system comprising:
- a display that displays an image data;
 - a detecting means that detects a given feature point from the image data;
 - a memory that stores a plurality of feature points in advance;
 - a checking means that checks whether or not the feature point detected by the detecting means is the same as any one of the feature points stored in the memory;
 - and
 - a discriminating-display means that discriminates and displays on the display the checked result

checked by the checking means.

22. The digital camera system according to claim 21,
wherein the memory stores at least one of specific
5 name information regarding the feature point and
priority information for setting a priority of
selection when a plurality of feature points are
detected at a time; and
the discriminating-display means displays on the
10 display information stored in the memory regarding
the feature point checked as the same by the checking
means.

23. A digital camera system comprising:
15 a detecting means that detects a given feature point
from an image data; and
a control means that controls the detected feature
point in connection with the image data.

20 24. A digital camera system comprising:
a memory that stores a given feature point in an image
data in connection with information regarding the
given feature point;
a detecting means that detects a feature point from
25 an image data;
an assigning means that assigns at least one of the
given feature point and information regarding the
given feature point stored in the memory;
an agreement checking means that checks whether or
30 not the feature point detected by the detecting
means is the same as the given feature point;
a size checking means that checks the size of the
feature point checked by the agreement checking
means as the same; and
35 a zooming means that zooms in/out a given area
including the feature point corresponding to the
size of the feature point checked by the size

checking means.

25. The digital camera system according to claim 24,
wherein the agreement checking means includes an
5 overlaid display means that displays a subject
corresponding to the feature point checked as the
same by the checking means overlaid with a maker.
26. The digital camera system according to claim 24,
10 wherein the information regarding the feature point
is specific name information for specifying the
feature point.
27. The digital camera system according to claim 24,
15 wherein the zooming means zooms in/out such that the
size of the feature point checked by the size checking
means becomes a given range of the size.
28. The digital camera system according to claim 24
20 further comprising:
a position-detecting means that detects the position
of the agreed feature point in the shooting image
frame;
wherein the zooming means includes a vibration
25 correction lens that corrects vibration upon
shooting and a vibration correction lens driver
that drives the vibration correction lens such that
the agreed feature point comes to a given position
in the shooting image frame in response to the
30 detected result of the position-detecting means.
29. The digital camera system according to claim 24
further comprising:
a position-detecting means that detects the position
35 of the agreed feature point in the shooting image
frame;
wherein the zooming means includes an electronic

zooming means that zooms in/out electronically such that the agreed feature point comes to a given position in the shooting image frame in response to the detected result of the position-detecting means.

30. A digital camera system comprising:
a detecting means that detects a given feature point from an image data;
10 a position-detecting means that detects the position of the feature point in a shooting image frame;
a vibration correction lens that corrects vibration upon shooting; and
a driver that drives the vibration correction lens
15 such that the feature point comes to a given position in the shooting image frame in response to the detected result of the position-detecting means.

31. The digital camera system according to claim 30,
20 wherein the given position locates in the vicinity of the center of the shooting image frame.

32. The digital camera system according to claim 30 further comprising:
25 a memory that stores the given feature point in the image data together with information regarding the given feature point;
an assigning means that assigns at least one of the given feature point and information regarding the
30 given feature point stored in the memory; and
an agreement checking means that checks whether or not the feature point detected by the detecting means is the same as the given feature point;
wherein the driver drives the vibration correction
35 lens such that the feature point checked by the agreement checking means as the same comes to the given position.

33. A digital camera system comprising:
a shooting instruction means that instructs to shoot
a still image of a subject;
5 a detecting means that detects a given feature point
from the still image data shot in response to the
instruction of the shooting instruction means;
a discriminating means that discriminates a state
of the given feature point detected by the detecting
10 means; and
a warning means that warns in accordance with the
discriminated result of the discriminating means.
34. The digital camera system according to claim 33,
15 wherein the given feature point is a pupil portion
of a person and when the discriminating means
discriminates that a pupil has not been detected,
the warning means gives a warning.
- 20 35. The digital camera system according to claim 33,
wherein the given feature point is an eye or a face
outline of a person and when the discriminating means
discriminates that the eye or the face outline has
a camera shake, the warning means gives a warning.
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36. The digital camera system according to claim 33,
wherein the detecting means detects a face of a person
before shooting a still image and the given feature
point is a face of a person and when the number of
30 the faces detected by the detecting means before
shooting a still image has not coincide with that
detected from the shot still image, the warning means
gives a warning.
- 35 37. A digital camera system comprising:
a shooting instruction means that instructs to shoot
an image of a subject;

a detecting means that detects a given feature point from the image data shot in response to the instruction of the shooting instruction means; a discriminating means that discriminates a state of the given feature point detected by the detecting means; and
a reshooting instruction means that instructs the shooting instruction means to reshoot the subject in accordance with the discriminated result of the discriminating means.

38. The digital camera system according to claim 37, wherein the given feature point is a pupil portion of a person and when the discriminating means discriminates that a pupil has not been detected, the reshooting instruction means instructs to reshoot the subject.

39. The digital camera system according to claim 37, wherein the given feature point is an eye or a face outline of a person and when the discriminating means discriminates that the eye or the face outline has a camera shake, the reshooting instruction means instructs to reshoot the subject.

40. The digital camera system according to claim 37, wherein the detecting means detects a face of a person before shooting an image and the given feature point is a face of a person and when the number of the faces detected by the detecting means before shooting an image has not coincide with that detected from the shot image, the reshooting instruction means instructs to reshoot the subject.

41. A digital camera system comprising:
a detecting means that detects a given feature point from an image data;

a memory that stores a plurality of color reproduction parameters for carrying out color reproduction of the whole image data;

5 a discriminating means that discriminates a face of a person from the feature point detected by the detecting means;

a size comparator that compares the size of the face discriminated by the discriminating means with a given value; and

10 a selecting means that selects a color reproduction parameter giving priority to skin color among the plurality of color reproduction parameters when the size comparator discriminates that the size of the face is the given value or more.

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42. A digital camera system comprising:

a detecting means that detects a given feature point from an image data;

20 a memory that stores a plurality of color reproduction parameters for carrying out color reproduction of the whole image data;

a discriminating means that discriminates a face of a person from the feature point detected by the detecting means;

25 a number comparator that compares the number of the faces discriminated by the discriminating means with a given value; and

30 a selecting means that selects a color reproduction parameter giving priority to skin color among the plurality of color reproduction parameters when the number comparator discriminates that the number of the faces is the given value or more.

43. A digital camera system comprising:

35 an imaging device that images a subject;

an aperture stop that controls light quantity incident on the imaging device;

a detecting means that detects a given feature point
from an image data output from the imaging device;
a discriminating means that discriminates the size
and the number of the faces from the feature point
5 detected by the detecting means; and
a control means that controls the aperture value of
the aperture stop to become small when the
discriminating means discriminates that the face
size detected by the detecting means is a first
10 given value or more and a second given value or
less.

44. A digital camera system comprising:

a detecting means that detects a given feature point
15 for discriminating a subject from an image data;
a setting means that sets a given setting condition
corresponding to at least one item of photometry,
measuring distance and white balance each including
a plurality of setting conditions upon shooting;
20 and
an instructing means that instructs the setting means
to set different setting condition in accordance
with the detected result of the detecting means.

25 45. The digital camera system according to claim 44
further comprising:

a discriminating means that discriminates the
subject;
wherein when the setting condition is any one of a
30 condition suitable for a landscape, a distant
subject, and a night view and when the
discriminating means discriminates a person as the
subject, the instructing means instructs the
setting means to set a setting condition suitable
35 for shooting a person.

46. The digital camera system according to claim 44,

wherein when the setting condition is suitable for shooting a person and when the detecting means does not detect a person as the subject, the instructing means instructs the setting means to set any one of
5 a condition suitable for a landscape, a distant object and a night view.

47. The digital camera system according to claim 46 further comprising:
10 a warning means that gives a warning when the setting condition is suitable for shooting a person and when the detecting means does not detect a person as the subject.

15 48. A digital camera system comprising:
an AF means that controls focusing on the basis of a signal output from a given AF area in an image data;
a detecting means that detects a given feature point
20 from the image data;
a face discriminating means that discriminates a face of a person from the feature point detected by the detecting means;
a position discriminating means that discriminates
25 a position of the face discriminated by the face discriminating means; and
a setting means that sets a given second area as an AF area when the position discriminating means discriminates that the face position is outside
30 of a given first area.

49. A digital camera system comprising:
a shooting lens that is composed of a zoom lens and a focusing lens for shooting a subject;
35 a position sensor that detects a position of the zoom lens;
a detecting means that detects a given feature point

and information regarding the feature point from
 an image data shot by the shooting lens; and
 a calculator that calculates a distance to the subject
 on the basis of information regarding the feature
 point detected by the detecting means and the
 position of the zoom lens detected by the position
 sensor.

50. The digital camera system according to claim 49,
 wherein the information regarding the feature point
 is at least one of the face size and the pupil distance.

51. The digital camera system according to claim 49
 further comprising:
 a restriction means that restricts a moving range
 of the focusing lens to a given range on the basis
 of the distance to the subject calculated by the
 calculator.

52. The digital camera system according to claim 49
 further comprising:
 an aperture stop that controls light quantity
 incident on the shooting lens; and
 an aperture determining means that determines an
 aperture value of the aperture stop such that when
 a plurality of faces are detected by the detecting
 means, a given face among the plurality of faces
 comes in focus on the basis of the distances to
 the plurality of faces calculated by the calculator.

53. A digital camera system comprising:
 an illumination means that illuminates a subject upon
 shooting the subject;
 a detecting means that detects a given feature point
 from an image data;
 a distance calculator that calculates a distance to
 the feature point on the basis of the feature point

detected by the detecting means; and
a illumination quantity setting means that sets an
illumination light quantity of the illumination
means on the basis of the distance calculated by
5 the distance calculator.

54. The digital camera system according to claim 53
further comprising:
a plurality of photometry areas that measure
10 luminance of the subject; and
an exposure setting means that sets an exposure
condition upon shooting on the basis of an output
of a given photometry area among the plurality of
photometry areas.

15 55. The digital camera system according to claim 53
further comprising:
a size detector that detects a face size or a pupil
distance from the feature point detected by the
20 detecting means; and
a lens position sensor that detects the focal length
of the zoom lens;
wherein the distance calculator calculates a distance
to the feature point on the basis of the face size
25 or the pupil distance detected by the size detector
and the focal length of the zoom lens detected by
the lens position sensor.

30 56. The digital camera system according to claim 53
further comprising:
a discriminating means that discriminates whether
or not the distance is within the controllable
exposure range of the illumination means on the
basis of the distance to the subject calculated
35 by the distance calculator; and
a warning means that gives a warning when the
discriminating means discriminates that the

distance is out of the controllable exposure range.

57. A digital camera system comprising:

a main illumination means that illuminates a subject
upon shooting the subject;

an auxiliary illumination means that illuminates the
subject with an auxiliary illumination in advance;

a detecting means that detects a given feature point
from an image data; and

a setting means that sets an illumination light
quantity of the main illumination means on the basis
of a reflection light from the feature point
illuminated with the auxiliary illumination by the
auxiliary illumination means.

58. The digital camera system according to claim 57,
wherein the feature point is a face portion of a person.

59. A digital camera system comprising:

an imaging device that shoots an image of a subject;

a memory that stores an image data;

a detecting means that detects a given feature point
from the image data;

an instructing means that instructs the imaging
device to shoot the subject for storing in the
memory; and

a controller that controls the detecting means not
to carry out detecting procedure to an image data
output from the imaging device before the
instructing means gives the instruction.

60. The digital camera system according to claim 59
further comprising:

a processing means that processes at least one of
white balance process and outline enhancement
process on the basis of the feature point detected
by the detecting means in response to the

instruction given by the instructing means.

61. The digital camera system according to claim 60 further comprising:

5 a controller that controls the memory to store the image data processed by the processing means.

62. A digital camera system comprising:

10 a memory that stores a given feature point together with information regarding the feature point detected from an image data;

a display that displays either the feature point or the information regarding the feature point stored in the memory; and

15 a deleting means that deletes from the memory at least a portion of the feature point or the information regarding the feature point displayed on the display.

20 63. A digital camera system comprising:

a memory that stores a given feature point together with information regarding the feature point detected from an image data;

25 a display that displays either the feature point or the information regarding the feature point stored in the memory; and

30 a controller that changes at least a portion of the feature point or the information regarding the feature point displayed on the display and stores to the memory.